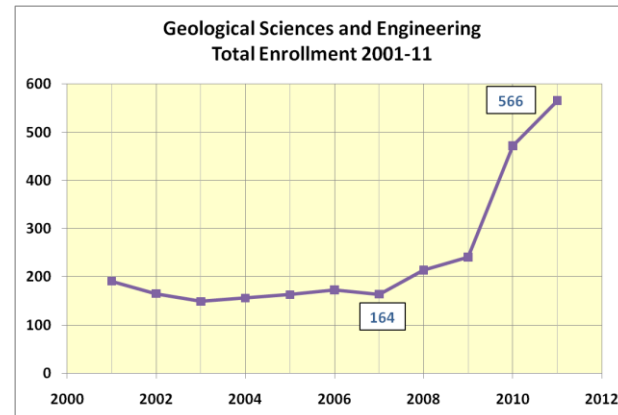


FALL 2011: GSE Growth Continues

- ♣ **566 Total GSE Students**
- ♣ **329 Undergrad Students** (includes FEP)
 82 G&G / 90 GE / 157 Petroleum
- ♣ **145 Graduate Students (on campus)**
 41 G&G / 33 GE / 71 Petroleum
- ♣ **92 Ft Wood/ Distance GE Grad Students**



New GSE Faculty Members



Dr. Shadab Anwar
 New Asst Professor in GE.
 PhD Florida International Univ in
 Geosciences; BS/MS Civil Engrg
 Lattice Boltzman modeling of flow
 through porous media.



Dr. Mingzhen Wei
 New Research Asst Prof in Pet E.
 PhD New Mexico Tech
 Reservoir simulation, natural gas,
 digital oil field.

GSE Faculty News



Dr. Baojun Bai
 Promoted to Assoc Prof and
 named to Lester R. Birbeck Chair
 in Petroleum Engineering
 Worldwide expert in EOR
 methods, particularly polymers.



Dr. Franca Oboh-Ikuenobe
 Named Fellow of the Geological
 Society of America (GSA)
 2011-12 President of AAPS-The
 Palynological Society



Dr. Shari Dunn Norman
 Named Chair of the Society of
 Petroleum Engineers (SPE) Chair
 of the 2011-12 Engineering
 Professionalism Committee



Dr. David Rogers
 2011 Meritorious Service Award
 of the Environmental &
 Engineering Geology Division
 of GSA.

Outstanding GSE Research

- ♣ **\$2.0 Million**
 GSE Dept
 2010 Research
 Expenditures
- ♣ **\$3.6 Million**
 GSE Dept
 2010 New
 Research Awards

GSE Strategic Planning: Please Help!

GSE faculty are beginning a year-long strategic planning effort called "Vision 2020." To lay a strong foundation for and to guide our future, we are developing the following:

Our Core Identity:

Mission Statement, Core Values, History

Understanding Who We Are, Our Present, and Anticipating our Future Conditions:

SWOT Analysis, de Bono's "Six Hats,"
 Competition, Constraints
 (Sustainable) Competitive Advantage

Our Future Direction

Vision Statement
 BHAG: "Big Hairy Audacious Goal"

How Will We Get There?

Strategy(ies); Strategic Objectives
 SMART Goals; Action Items

As we develop these, we would like key GSE alumni to join us and give input as to what world class programs in Geology/Geophysics, Petroleum and Geological Engineering should be, and your views on what our niche is. We want to produce the best graduates and best research possible for our customers /industries. Thank you!

September
 2011

m & m academy newsletter

Chair's Corner

Dear Mines and Metallurgy Academy Members,

Thanks to all of you that attended our April 2011 Academy meeting. Both our business meeting and annual dinner and induction ceremony were well attended by Academy members and guests. Our next meeting will be held on October 7, 2011 before the Missouri S&T Homecoming weekend. Our agenda is included with this newsletter.

Dr. Michael Moats became our newest Academy member with his induction during our recognition dinner. Mike is a graduate from 1992 (B.S.) and 1995 (M.S.) in Metallurgical Engineering. He earned a Ph.D. degree in Materials Science and Engineering from the University of Arizona in 1998. Mike is currently an Associate Professor of Metallurgical Engineering at the University of Utah. Thus far in his career, he has authored 37 publications based on his research activity and holds four patents. Mike's wife, Michele, is also a graduate of Missouri S&T with a degree in Electrical Engineering.

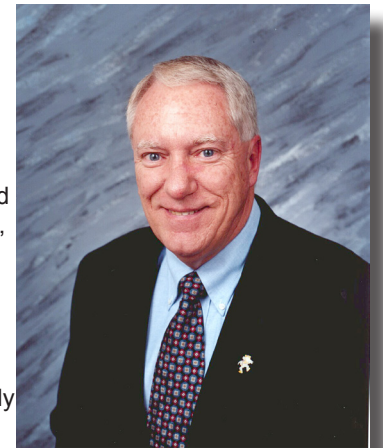
We also recognized two of our outstanding faculty members. Nominations were submitted by the three departments represented by our Academy. Those recognized this year were Dr. David Van Aken, Curators' Teaching Professor of Metallurgical Engineering and Senior Investigator at the Graduate Center for Materials Research. Dr. Van Aken joined the Missouri S&T faculty in 1993 after having taught at the University of Michigan for seven years. He has been the recipient of 14 awards for teaching excellence, four Missouri S&T faculty excellence awards, and a Missouri S&T Alumni Association Outstanding Advisor Award. He is the author of over 90 technical articles and the recipient of three patents. The second recipient of an Academy Faculty Award was Dr. Hyoung Lee, Assistant Professor of Nuclear Engineering. Dr. Lee's research interests are radiation imaging, computed tomography reconstruction, and digital image processing. He has 86 refereed journal articles, made 18 invited presentations, and has nine registered patents. Both awardees received a \$1000 cash award and a certificate from our Academy.

Seven seniors were also recognized as Academy Scholars. They each received a \$500 cash award and an engraved watch. These are special awards that are given to students who are judged by their peers as graduates with the highest potential to excel in their professional careers. Those receiving awards as 2011 Scholars were Erica Ronchetto (Ceramic Engineering), Andrew Merritt (Metallurgical Engineering), Kelsey Kurilla (Petroleum Engineering), Marina Jacobe (Geological Engineering), Alex Hopkins (Mining Engineering), Crystal Twenter (Geology and Geophysics), and Aaron Olson (Nuclear Engineering).

Included with this newsletter are updates from our departmental chairs. Drs. Ralph Flori, Wayne Huebner, and Samuel Frimpong will be giving detailed reports during our meeting.

I hope to see you on Friday, October 7, 2011. If you are able to arrive on Thursday, please plan to attend the third Dr. Thomas J. O'Keefe Lecture that will be given by Ben Winter, MetE, '80 at 3:30 in room 204 of McNutt Hall.

Keith Wedge, Chair
 Mines and Metallurgy Academy
 September 2011



Mines and Metallurgy Academy Business Meeting
 October 7, 2011

- 8:30 AM Continental Breakfast
- 9:00 AM Opening Remarks/Introductions
- 9:15 AM Approval of April 14, 2011 Minutes
- 9:20 AM Committee Reports
 Nominating (Greg Skannal)
 Student Affairs & Scholarships (Ted Ruppert)
 Strategic Planning (Ralph Flori)
 Jackling Report (Chris Ramsay)
- 9:45 AM Break
- 10:00 AM University Advancement Report (Patty Ingle)
- 10:30 AM Department Reports
 Samuel Frimpong
 Wayne Huebner
 Ralph Flori
- 12:00 PM Working Lunch
 Old Business
 Dr. Thomas J O'Keefe Lectures
 Vision 2020 - Future of Missouri S&T
 New Business
 Nomination of Academy Members
 Faculty Awards
 Academy Scholars
- 1:30 PM Open Discussion, Wrap-Up, and
 Optional Tours of Departments

MNE STATISTICS

- ❑ Enrollment at **448** (no change); **245** Seniors, Juniors, and Sophomores; **102** Freshmen; **101** ME/MS/PHD
- ❑ **\$320K** in endowed, industry & competitive scholarships for AY2010-11
- ❑ MNE graduates the largest number of graduates in a decade: **50** MinE and **28** NucE Graduates
- ❑ **100%** placement for grads with **\$65K** starting salary
- ❑ Overall, **> 90%** of students involved in Department, Campus and External Extracurricular Activities

2011 RESEARCH NEWS

- ❑ **\$650K** funding by CDC NIOSH, Caterpillar, Peabody on *Dump Truck Vibrations Research*
- ❑ **\$430K** funding by Department of Homeland Security for *Counter-Terrorism Research*
- ❑ **\$1.7 M** funding by CDC-NIOSH for *Mine Safety and Health Research*
- ❑ **\$2.4 M** DOE award for *Slurry Jet in Enhanced Geothermal Energy* (With Impact Tech)
- ❑ DOE **\$180K** funding for *S&T-Lincoln Partnership in Education Research*
- ❑ **\$1.75 M** USNRC, USDOE, Research Board & Industry Funding for *Faculty Develop, U/G Scholarships & Research Initiatives*

A SUCCESSFUL IME 2011 CONFERENCE!!

Conference Chair

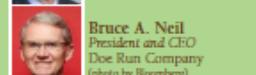


Chris C. Curfman
President
Caterpillar Global Mining

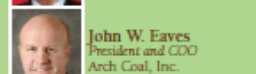
Keynote Speakers



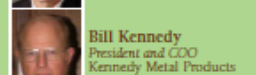
Michael DeCola
President and CEO
Mississippi Lime Company



Bruce A. Neil
President and CEO
Doe Run Company
(photo by Bloomberg)



John W. Eaves
President and COO
Arch Coal, Inc.



Bill Kennedy
President and COO
Kennedy Metal Products



Stephen J. Owens
Interim President
University of Missouri System



Mark Savit
Partner
Patton Boggs LLP

Meeting the Technological Innovations and Global Talent Challenges of the Future Mining Industry:



Samuel Frimpong
Professor and Chair
Mining & Nuclear Eng.
Missouri S&T



Paul A. Lang (on leave)
Senior Vice President
Operations
Arch Coal, Inc.

Chris Curfman, President of CAT Global Mining and the Conference General Chair will open the conference with a keynote address entitled, "Mining Safely! Mining More! Mining Right!" The conference will deliver on the two key issues – technological innovations and the global talent for the mining industry of the future.

Enjoy the conference and please communicate to the Technical Committee your thoughts for future conferences.

Dr. Samuel Frimpong and Paul A. Lang,
Co-Chairs, Conference Technical Committee

DEPARTMENT ACTIVITIES



S&T Mining Engineering hosts its FS 2011 Kick-Off Meeting at the Experimental Mine

Several Students receive scholarships

WIN attend the 08/29/11 Debate on Nuclear Energy: Is Nuclear Energy worth the Risk?

WIN hosted a Girl Scout Merit Badge Night on 04/29/11



Students

- ♣ **205** total undergrad students (up 7.3%)
→ 104 MetE / 101 CerE
- ♣ **60** graduate students (down 9%)
→ 13 Met / 10 Cer / 37MSE
- ♣ ≈ \$329K in endowed scholarships given out in AY11-12; ≈ \$125K in competitive scholarships from professional organizations
- ♣ 100% placement rate in May 2011; starting salaries Met: \$57,444 Cer: \$64,880



Faculty

- ♣ Kent Peaslee is now a Vice President of the AIST.
- ♣ Del Day received the 2011 Stookey Lecture of Discovery Award
- ♣ Wayne Huebner visited China as part of an exploratory visit to create a new university.



Kent Peaslee



Delbert & Shirley Day



Wayne Huebner

Research

- ♣ A record year for research expenditures: \$7.59M (MSE generates 21.2% of the research on campus with 5.5% of the faculty).
- ♣ \$5M renovation of the MRC in progress; Mar- 2012 completion.
- ♣ MetE Students and Faculty receive AFS Best Paper Awards:
 - D. Kline, S. Lekakh and V. Richards, "Improving Investment Casting Mold Permeability using Graphite Particles"
 - L. Bartlett, K. Peaslee and D. Van Aken, "Effect of Phosphorous and Silicon on the Precipitation of K-carbides in the FE-30Mn-9%Al-X%Si-0.9%C-0.5%Mo Alloy System"

News from 2011-12

- ♣ The 22nd A. Frank Golick Lecture was given by Diran Apelian, Howmet Prof @ WPI
- ♣ The Missouri S&T "Miner Mayhem" team placed second in the TMS 2011 Materials Bowl Competition.
- ♣ MSE Alumni receive Professional Degrees at May commencement:
 - Paul I. Fleischut, B.S. MetE, '85 Partner, Patent Attorney at Senniger Powers, LLP
 - * Dr. Paul Angel, B.S. CerE, '85, M.S. CerE, '87, NASA Glenn Research Center
 - Philip D. McPherson, B.S. CerE, '83 Senior VP and General Manager, Saint-Gobain Containers, Inc.

